



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,829	02/28/2006	Jun Fujikami	017700-0184	5400
23392	7590	08/05/2008	EXAMINER	
FOLEY & LARDNER			CAZAN, LIVIU RADU	
2029 CENTURY PARK EAST			ART UNIT	PAPER NUMBER
SUITE 3500				3729
LOS ANGELES, CA 90067			MAIL DATE	DELIVERY MODE
			08/05/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/569,829	<b>Applicant(s)</b> FUJIKAMI ET AL.
	<b>Examiner</b> LIVIUS R. CAZAN	<b>Art Unit</b> 3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 25 April 2008.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s)       is/are withdrawn from consideration.

5) Claim(s)       is/are allowed.

6) Claim(s) 1-10 is/are rejected.

7) Claim(s)       is/are objected to.

8) Claim(s)       are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on       is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No.      .
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date      

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date      

5) Notice of Informal Patent Application

6) Other:

#### **DETAILED ACTION**

1. The amendment filed on 4/25/2008 has been fully considered and made of record.

##### ***Priority***

2. The certified copy of the priority documents has not yet been received. However, steps have been taken to obtain these documents. Applicant will be notified of any changes to the status of this issue.

##### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 7 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

5. Specifically, claims 7 and 10 are grammatically incorrect, and it is unclear exactly what is being claimed, since no relationship is recited between the dry air in claims 7 and 10 and any other claimed structural elements. **The claims will be rejected as best understood.**

##### ***Claim Rejections - 35 USC § 102***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
7. **Claims 1-4, 6, 7, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaneko (US6498302).**

8. Kaneko discloses (refer to Example I in col. 10) forming a wire by coating raw material powder for a superconductor with a metal (Ins. 46-49), drawing the wire (Ins. 49-54), thereafter rolling and sintering the wire twice (Ins. 49-62). There is an interval between the rolling and sintering steps when the wire is held at a temperature above 80 degrees C (such as while heating up to 850 degrees C), the interval being shorter than 7 days.

9. **Regarding claims 6, 7, 9, and 10,** it is readily apparent that at some point between providing the wire and rolling it or between a rolling step and a sintering step the wire would be held under normal atmosphere, i.e. water vapor together with dry air having the specified dew point and comprising nitrogen and argon.

10. **Claims 1, 2, and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Whitlow (US5223478).**

11. Whitlow discloses providing a drawn wire formed by coating raw material powder for a superconductor with a metal (see steps 1-3, Fig. 1), thereafter rolling (col. 4, Ins. 20-22) and sintering the wire (step 7, Fig. 1; see In. 64 in col. 5 to In. 8 in col. 6). There is an interval between the rolling and sintering steps when the wire is held at a temperature above 80 degrees C, the interval being shorter than 7 days (such as 450 degrees for 30 minutes; see col. 4, Ins. 20-35).

12. **Regarding claim 5,** Whitlow discloses sealing the wire in a container under vacuum (i.e. reduced pressure), followed by hot isostatic pressing (see col. 4, Ins. 36-50).

13. Regarding claims 6 and 7, it is readily apparent that at some point between providing the wire and rolling it or between a rolling step and a sintering step the wire would be held under normal atmosphere, i.e. water vapor together with dry air having the specified dew point and comprising nitrogen and argon. Moreover, Whitlow discloses utilizing argon during the hot isostatic pressing (see col. 4, ln. 44).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko in view of Whitlow.

16. Kaneko discloses substantially the same invention as the Applicant, except for holding the wire in a container having a reduced pressure relative to pressure outside the container, as claimed.

17. As discussed above, Whitlow discloses sealing a wire in a container under vacuum, in preparation for a hot isostatic pressing operation.

18. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Kaneko by performing such sealing and hot isostatic pressing, in view of the teachings of Whitlow, in order to obtain a superconducting wire having the improved properties disclosed by Whitlow (see col. 2, Ins. 39-45).

***Double Patenting***

19. Claims 1 and 3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3 and 9 of copending Application No. 10/568,537. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 3 and 9 of the '537 application anticipate claim 1 of the present application, and claim 9 anticipates claim 3.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Response to Arguments***

20. Applicant's arguments filed 6/3/2008 have been fully considered but they are not persuasive.

21. Applicants argue Kaneko does not anticipate the claims because Kaneko does not disclose "at least one of an interval between the step of providing a drawn wire and the step of rolling and an interval between the step of rolling and the step of sintering" being less than seven days nor "at least one of an interval between said step of providing a drawn wire and said step of the first rolling, an interval between said step of the first rolling and said step of the first sintering, an interval between said step of the (k-1)<sup>th</sup> sintering and said step of the k<sup>th</sup> rolling, and an interval between said step of the k<sup>th</sup> rolling and said step of the k<sup>th</sup> sintering" being less than seven days. Moreover, Applicants argue the heating up to 850 degrees C is the sintering step in Kaneko and that Kaneko "fails to disclose 'while' heating up to 850 degree C".

22. The Examiner respectfully disagrees. Sintering cannot begin instantly. Rather, after the wire is placed in the furnace, the temperature of the wire will gradually increase to the sintering temperature, i.e. the temperature at which the sintering process takes place. For some time interval clearly less than seven days, the temperature of the wire will be above 80 degrees yet below 850 degrees.

***Conclusion***

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIVIUS R. CAZAN whose telephone number is (571)272-8032. The examiner can normally be reached on M-T 6:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571)272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. Dexter Tugbang/  
Primary Examiner  
Art Unit 3729

/L. R. C./ 8/4/2008  
Examiner, Art Unit 3729